



DEFENSE RESEARCH AND ENGINEERING  
3040 DEFENSE PENTAGON  
WASHINGTON, D.C. 20301-3040



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MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (COMMAND,  
CONTROL, COMMUNICATIONS AND INTELLIGENCE)  
DIRECTOR, OPERATIONAL TEST AND EVALUATION  
GENERAL COUNSEL  
ASSISTANT SECRETARY OF THE ARMY (RESEARCH,  
DEVELOPMENT AND ACQUISITION)  
ASSISTANT SECRETARY OF THE NAVY (RESEARCH,  
DEVELOPMENT AND ACQUISITION)  
ASSISTANT SECRETARY OF THE AIR FORCE  
(ACQUISITION)  
DIRECTOR, ADVANCED RESEARCH PROJECTS AGENCY  
DIRECTOR, NATIONAL SECURITY AGENCY  
DEPUTY UNDER SECRETARY OF DEFENSE (LOGISTICS)  
DIRECTOR, ACQUISITION PROGRAM INTEGRATION

SUBJECT: DoD Federally Funded Research and Development  
Center (FFRDC) Management Plan

Provided for your review is the revised FFRDC Management  
Plan that will replace the current version dated August 14,  
1992.

Although it has been informally coordinated, your  
coordination is requested prior to its implementation and  
release to Congress. We are aware of the proposed and  
ongoing reviews, studies and legislation that may impact  
FFRDC management and require further revision to the plan.  
However, we believe it is important that the plan be provided  
to Congress prior to the upcoming Appropriations Conference.  
In order to accomplish this, your comments are required no  
later than August 26, 1994. Questions can be directed to Bob  
Nemetz, Director, OSD Studies and FFRDC Programs,  
703-756-2096.

Thank you for your attention to this important matter.

*unhlsy*  
John M. Bachkosky  
Deputy Director

Attachment



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703 614 1491

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*note - Melty  
Comments given  
to Col Bero as  
noted in this copy  
Bero sent SMC  
Response*

DEPARTMENT OF DEFENSE  
FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER (FFRDC)  
MANAGEMENT PLAN

INTRODUCTION

DoD-sponsored Federally Funded Research and Development Centers (FFRDCs) represent a long-term Government investment in a unique resource for research, systems development, and analysis. Over the years FFRDCs have been essential contributors to maintaining the superiority of United States forces, FFRDCs perform work that is (1) integral to the mission and operation of their sponsoring organizations and (2) cannot be performed as effectively by existing in-house, other non-profit, or for-profit contractor resources,

Because of the importance and unique status of FFRDCs, the DoD must ensure that their use is appropriate and that DoD has effective policies and procedures for their management,

PURPOSE

This plan defines DoD policies and procedures for the establishment, management, use, and termination of DoD-sponsored FFRDCs. It also provides guidelines and procedures for ensuring compliance with the Government-wide policies set forth in Office of Federal Procurement Policy (OFPP) Policy Letter 84-1, and Federal Acquisition Regulation, Part 35.017.

BACKGROUND

DoD FFRDCs are currently operated by universities or privately organized, non-profit corporations under long-term Government contract. Their mission is to provide high-quality technical work and analysis, required by their sponsors. They are outside of the Government to permit the management flexibility necessary to compete with industry to attract and retain quality scientists, engineers, and managers. The common goals for these centers are to: (1) provide a stable long-term relationship and in-depth knowledge of their sponsors programs and operations; (2) maintain continuity and currency in their special fields of expertise; (3) maintain objectivity and a high degree of competency in their staff and work; and, (4) provide the ability to respond to the emerging needs of their sponsors. FFRDCs provide both long-term and immediate, short-term assistance to help sponsors meet urgent and high priority requirements. They are granted

privileged access to Government and contractor information and as such, bear a special responsibility to avoid conflicts of interest and have accepted stringent restrictions to their scope and method of operation,

The DoD currently sponsors 10 FFRDCs managed by eight parent organizations (see Appendix A). The ten FFRDCs fall under one of the three categories of FFRDCs defined by the National Science Foundation. This management plan recognizes the different purposes and contributions by organizations in each category. The distinctions between categories of FFRDCs are an important consideration in the management approach that should be applied to each of them. The three categories as represented in the DoD are:

- (1) Studies and Analyses (S&A) Centers: S&A centers were created and exist to deliver independent and objective analyses and to advise in “core” areas important to their sponsors in support of policy development, decisionmaking, alternative approaches, and new ideas on, major defense issues.
- (2) Systems Engineering and Integration (SE&I) Centers: SE&I centers were created and exist to complement sponsor’s in-house technical and engineering capabilities to ensure that complex systems will meet operational requirements. The centers assist with the creation and choice of system concepts and architectures, the definition of system and subsystem requirements and interfaces, the acquisition of hardware and software, the testing and verification of performance, and with the continuous improvement of system operations. They often play a critical role in assisting their sponsors in technically formulating, initiating, and evaluating programs and activities undertaken by firms in the for-profit sector,
- (3) Research & Development (R&D) Laboratories: R&D laboratories were created and exist to fill voids where in-house and private sector research and development centers were/are unable to meet DoD peculiar needs. Specific objectives for these FFRDCs are to: (1) maintain over the long-term a technical competency in very sensitive areas where the Government cannot rely on the private sector, and/or (2) develop and transfer important new technology to the private sector so the Government can benefit from a wider, broader base of expertise. R&D laboratories engage in research

programs that emphasize the evolution and demonstration of advanced system design concepts and technology, and the transfer or transition of technology.

## RESPONSIBILITIES

The Director of Defense Research and Engineering (DDR&E), consistent with the provisions of this plan, is responsible to the Deputy Secretary of Defense through the Under Secretary of Defense for Acquisition and Technology to:

- Ensure that finding ceilings established for each of the FFRDCs are consistent with overall DoD requirements and strategy.
- Monitor the mechanisms used by FFRDC sponsors to ensure the appropriateness and value of FFRDC efforts and activities,
- Oversee implementation and execution to ensure compliance with this management plan by each FFRDC sponsor.

The head of the sponsoring agency for each FFRDC will be responsible for ensuring that each FFRDC is being used for the intended purposes, the costs of the goods and services it provides are reasonable, that it produces high-quality work, and that recipient organizations make appropriate use of that work. The sponsoring agency is also responsible for reviewing descriptions of work proposed to be done by the FFRDC and ensuring that the work assigned is consistent with the mission of the FFRDC. FFRDC sponsors will assure the DDR&E that these provisions are being satisfied,

## MANAGEMENT AND USE

Primary “sponsors of FFRDCs shall maintain sponsoring agreements and/or operating instructions that establish policies and procedures for the management and operation of the FFRDC. The specific content of these documents may vary depending on the nature of the relationship between the sponsor and the FFRDC. However, at a minimum the following must be included in either the sponsoring agreement or sponsoring agency’s operating policies and procedures:

- 1) A statement of the purpose for establishing the FFRDC, along with a description of its mission, general scope of effort, and the role the FFRDC has in accomplishing the sponsoring agency's mission. This statement must be specific enough to permit a discrimination between work that is within the scope of effort for which the FFRDC was established and work that should be performed by a non-FFRDC.
- 2) Provisions for the orderly termination or nonrenewal of the contract, disposal of assets, and settlement of liabilities, The responsibility for capitalization of the FFRDC must be defined in such a manner that ownership of assets maybe readily and equitably determined upon termination of the FFRDC's relationship with its sponsor(s).
- 3) Provisions for the orderly termination or renewal of the agreement, disposal of assets and settlement of liabilities,
- 4) A prohibition against the FFRDC's competing with any non-FFRDC concern in response to a Federal agency request for proposal for other than the operation of an FFRDC. This prohibition is not required to be applied to any parent organization in its non-FFRDC operations. Moreover, responses to requests for information, qualifications, or capabilities are not prohibited unless the sponsor chooses to make such a restriction. Also, this prohibition is not intended to preclude laboratory FFRDCs from participation in dual-use technology transfer audits when appropriate and authorized in their sponsoring agreement.
- 5) A determination of whether the FFRDC may accept work from other than the sponsor(s). If nonsponsor work can be accepted, a description of the procedures to be followed will be included, along with any limitations as to the nonsponsors from which work can be accepted (e.g., other Federal agencies, State, local or foreign governments, nonprofit or profit organizations).
- 6) A description of the procedures used to make an annual assessment to evaluate performance in the areas of technical quality, responsiveness, value, cost and

timeliness. Also required is a description of the mechanism used to provide feedback to the FFRDC in order to identify and resolve any perceived or real problems,

7) Other requirements as appropriate (for example):

- ◆ When cost-type contracts are used, the sponsor(s) should identify any cost elements that require advance agreement and/or approval. Such items include, but are not limited to, personnel compensation, depreciation, various indirect costs such as Independent Research and Development, or others as deemed appropriate by the sponsor(s),
- ◆ Where fees are determined by the sponsor(s) to be appropriate, considerations affecting their negotiations should be identified, In establishing fee objectives, evaluation should be made of the sources of capital reserves (e. g., fees, depreciation, facilities capital cost of money, borrowing, etc.) and the application of funds (e.g., capital acquisitions, non-reimbursable costs ordinary and necessary for the operation of the FFRDC, etc.). Working capital needs should be evaluated to assure that balances are sufficient, but not excessive, for the operation of the FFRDC.

## **FFRDC FUNDING**

The overall funding level for DoD FFRDCs is approved by the DDR&E based upon several factors, e.g., sponsor-submitted requirements, established guidelines for determining workload requirements for each category of FFRDC, and the overall DoD funding strategy and budget limitations.

The DDR&E will establish finding ceilings for each FFRDC annually and will ensure that the combined FFRDC funding is within the total authorized for all FFRDCs. The ceilings will apply to FFRDC finding obligations for a given fiscal year, Obligations are defined as DoD funds actually obligated on the FFRDC contract, including offsetting de-obligations,

Requests to the DDR&E for deviations from or exceptions to established ceilings for any specific FFRDC will be presented by the sponsor with appropriate justification.

The guidelines to be used by FFRDC sponsors in projecting workloads and finding requirements for each of the FFRDC categories are:

- Studies and Analyses Centers (S&A). (1) maintain a critical mass of staff capability in major subject areas important to their sponsors, (2) maintain a relatively stable annual level-of-effort to avoid major changes in finding and staff levels, and (3) focus on the kinds of work that are difficult to perform inside the DoD because of internal management pressures, and which may also require access to sensitive government information and/or data that may be proprietary for profit-making firms. The finding levels for this category of FFRDC should not be based on the merits of individual projects/tasks because that may preclude the maintenance of “core” capabilities and short term response capabilities. The “core” represents technical staff-years to respond to the sponsor’s most important requirements appropriate to each S&A FFRDC. (Appendix B contains the standard definitions of MTS and work year to be used for computing MTS requirements.)
- Systems Engineering and Integration Centers (SE&I). (1) maintain a long-term, stable core capability when the sponsor has determined that no in-house or competitive private for-profit capability exists to perform the requirement as effectively, and (2) respond to changes in workload and funding consistent with the trend in the most relevant portions of the DoD budget (research and development and/or procurement) supporting the types of programs/systems within the FFRDC mission area,
- Research and Development (R&D) Laboratories. The requirements, priorities and judgments of the FFRDC sponsors, the applicable DoD advisory and oversight committees and the DDR&E.

## **FFRDC REPORTING REQUIREMENTS**

The Office of the DDR&E requires specified and ad hoc reports in order to comply with Congressional reporting requirements and to perform its necessary oversight functions and responsibilities. The schedule and content of reports and other submissions currently required are shown at Appendix C.

## FFRDC COMPREHENSIVE REVIEWS

Prior to renewal of the FFRDC contract, the sponsor shall conduct a comprehensive review of the continuing use of and need for the FFRDC. This review must be performed in accordance with the Federal Acquisition Regulation, Part 35.017. The resulting determination to approve continuation or termination of the sponsorship shall be made by the head of the sponsoring agency, with the concurrence of the DDR&E, prior to the anticipated contract renewal date. Also, the sponsor shall advise the DDR&E upon the initiation of a required review and the expected date of its completion. At that time, the DDR&E will have the opportunity to advise the sponsor of any special interest items or requirements to be addressed during the review,

Appendix D contains guidelines for the conduct of comprehensive reviews, Sponsors are expected to implement the guidelines to ensure consistency and thoroughness in the review process within the DoD,

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## APPENDIX A

### DoD FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS

#### STUDY AND ANALYSIS CENTERS

CENTER FOR NAVAL ANALYSES, Alexandria, VA,

SPONSOR: NAVY

CNAS work for the Navy and Marine Corps encompasses tactical development and evaluation, operational testing of new systems, assessment of current capabilities; logistics and readiness; manpower and training; space and electronic warfare; cost and operational effectiveness analysis, assessment of advanced technology, force planning, and strategic implications of political-military developments. Twenty percent of CNA's analysts are assigned to fleet and field commands on two-year tours.

RAND PROJECT AIR FORCE, Santa Monica, CA

SPONSOR: USAF

Conducts a continuous and interrelated program of objective analyses on major cross-cutting policy and management issues of enduring concern to the Air Force, including studies on preferred means of developing and employing aerospace power; national security threats and strategies; Air Force missions, capabilities, and organizations; strategic and tactical force operations; and technology, support, and resource management,

INSTITUTE FOR DEFENSE ANALYSES (IDA), Alexandria, VA

SPONSOR OSD

Performs studies and analyses for the Office of the Secretary of Defense, Joint Staff, Unified Commands and Defense Agencies in the mess of defense systems, science and technology, strategy and forces, resource analysis, advanced computing and information processing, training, simulation, acquisition process, and the industrial base.

RAND NATIONAL DEFENSE RESEARCH INSTITUTE, Santa Monica, CA SPONSOR: OSD

Conducts a wide range of research and analyses in the areas of international security and economic policy; threat assessment; defense strategy and force employment options; applied science and technology; information processing systems; systems acquisition, readiness and support systems; and active-duty and reserve manpower, personnel, and training for the Office of the Secretary of Defense, Joint Staff, Unified Commands, and Defense Agencies.

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LOGISTICS MANAGEMENT INSTITUTE, McLean, VA

SPONSOR: OSD

Conducts ~~research~~, studies and analyses for the Office of the Secretary of Defense, Military Departments, Defense Agencies, Joint Staff, and Unified Commands in its mission areas: material management, acquisition, installations, environment, operational logistics, international programs, force management, and information science,

RAND ARROYO CENTER, Santa Monica, CA

SPONSOR: ARMY

Conducts a wide range of research, studies and analyses in the areas of strategy, force design and operations; readiness and support ~~infrastructure~~; applied science and technology; manpower and training; threat assessment, and ~~#u-my~~ doctrine.

### SYSTEMS ENGINEERING/INTEGRATION CENTERS

AEROSPACE CORPORATION, Los Angeles, CA

SPONSOR: USAF

Performs ~~general~~ systems engineering and integration for DoD space systems. Provides planning, systems definition and ~~technical~~ specification support; analyzes design and design compromises, ~~interoperability~~, manufacturing and quality control; and assist with test and evaluation, launch support, flight tests, and orbital operations. Appraises the technical performance of contractors,

MITRE C31 DIVISION, Bedford, MA

SPONSOR: OSD

Performs general systems engineering and integration for the DoD Command, Control, Communications, and Intelligence (C3I) community. Provides direct support through program definition; ~~specification of~~ technical requirements; system integration; analyses of design and design compromises; hardware and software review; and test and evaluation. Appraises contractors' technical performance,

IDA OPERATIONAL TEST AND EVALUATION CENTER, Alexandria, VA

SPONSOR: OSD

Provides test and evaluation support to OSD. Provides analyses of test plans, operational assessment and test results for weapons and other systems, including new and proposed equipment of all ~~types~~. Addresses a range of considerations to include the proposed equipment of all types, and the relationship of effectiveness to technical characteristics, required support, and deployability,

## RESEARCH AND DEVELOPMENT LABORATORIES

SOFTWARE ENGINEERING INSTITUTE, Pittsburgh, PA

SPONSOR: ARPA

SEI is charged with bringing technology to bear on rapid improvement of the quality of operational software in software intensive systems; with accelerating the reduction to practice of modern software engineering technology and promulgating the use of this technology throughout the software community and with fostering standards of excellence for improving software engineering practice.

MIT LINCOLN LABORATORY, Lexington, MA

SPONSOR: USAF

The laboratory carries out a program of research and development emphasizing advanced electronics by demonstrating technical feasibility of advance system concepts and technology, Program activities extend from fundamental investigations through design, development, and field test prototype systems using new technologies.

IDA C3I LABORATORY, Bowie, MD; Princeton, NJ; LaJolla, CA

SPONSOR: OSD/NSA

Conducts fundamental research for the NSA, in (1) cryptology, including the creation and analysis of complex encipherment algorithms, as well as in speech and signal analyses; and (2) various technologies associated with supercomputing and parallel processing including new architectures, hardware, and software (including prototypes), as well as parallel processing algorithms and applications.

## APPENDIX B

### MEMBER OF TECHNICAL STAFF (MTS)

A MTS applies to direct professional and consultant labor, performed by researchers, mathematicians, programmers, analysts, economists, scientists, engineers, and others who perform professional-level technical work primarily in the fields of studies and analyses; system engineering and integration, systems planning; program and policy planning and analysis; and basic and applied research,

Educational requirements for MTS employees and consultants are a bachelor degree from an accredited college or university. In rare instances, nondegree personnel may be included, but only if they possess the equivalent of a bachelor degree in education and experience, and are performing work of the same type and level as that performed by degreed MTS,

For cost and ceiling purposes a MTS work year is defined to be 1,810 hours of full time employee or consultant effort (subcontracting dollars and subcontracting labor excluded). The 1,810 hour figure is derived as follows for full time employees:

Total paid hours in a work year	2,080
Less Holidays	(80)
Vacations	(120)
Sick Leave	(60)
Other Paid Absences	<u>(10)</u>
Total available hour/year	1,810

If cost per MTS work year must be calculated, FFRDC finding, excluding subcontracting to others by the FFRDC, is divided by the number of MTS work years performed by full or part-time employees and consultants,

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## APPENDIX C

### FFRDC REPORTING REQUIREMENTS

This Appendix identifies reporting requirements for **FFRDC** sponsors.

<u>ANNUAL REPORTING REQUIREMENTS</u>	<u>DUE DATE</u>	<u>DESCRIPTION</u>
Annual Congressional Report and FFRDC Projected Funding Requirements	15 November	Provide <b>DDR&amp;E with FFRDC</b> funding and related MTS date in support of: <ul style="list-style-type: none"><li>- Annual Congressional Report</li><li>- <b>Budget</b> Estimates</li></ul> DDR&E will request the data submission providing an appropriate format. The report should include actual <b>FFRDC</b> finding and MTS for previous <b>and</b> current fiscal years; and projections for the budget year and two <b>outyears</b> .
<b>Mid-Year</b> Status Update	15 April	Provide <b>DDR&amp;E with a</b> report for use in monitoring <b>FFRDC</b> obligations in accordance with <b>DDR&amp;E</b> guidance, The report <b>should</b> address the sponsors ability to use and <b>fund all</b> authorized ceiling, if they anticipate having ceiling available; <b>and</b> if they anticipate submission of a request for exceptions.
Annual <b>Review</b> Assessment	30 Days <b>After</b> completion or prior to the end of the fiscal year	Provide to <b>the DDR&amp;E</b> a copy <b>of the</b> annual review assessment. The requirements for an annual assessment may be met by the comprehensive review during the year that a comprehensive review is required.

## ANNUAL REPORTING REQUIREMENTS

## DUE DATE

## DESCRIPTION

Changes to Sponsoring Agreement/Operating Instructions

Within 30 days of implementation of changes

Provide the **DDR&E** with copies of changes to the sponsoring agreements and operating instructions. The changes/operating instructions should be in accordance with **the** Management Plan, OFPP Policy Letter 84-1, FAR Part 35.017, and Public Law.

Comprehensive Review Notification

One year prior to initiation of the Comprehensive Review

Advise the **DDR&E** of Comprehensive Review initiation. **DDR&E** will advise the sponsor of any special review requirements.

Comprehensive Review

NLT 90 days prior to current sponsoring agreement termination date

Provide to **the DDR&E** the results of a Comprehensive Review of the use and need for each **FFRDC** in accordance with the Management Plan (see Appendix D) OFPP Policy Letter 84-1, FAR Part 35, 017, and Public Law, **DDR&E** concurrence on the Comprehensive Review is required prior to renewal of the **FFRDC** contract.

## APPENDIX D

# COMPREHENSIVE REVIEW GUIDELINES FOR DoD SPONSORED FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS

**PURPOSE:** The purpose of the comprehensive review is to formally analyze the use and need for the FFRDC in order to assist the head of the sponsoring agency with determining whether to continue sponsorship of the FFRDC.

This appendix provides the guidelines for reporting the results of FFRDC comprehensive reviews in accordance with this management plan, OFPP Policy Letter 84-1, and the FAR.

- Identify the FFRDC, its primary sponsor and contracting activity, Include the date and term of the FFRDC's current sponsoring agreement.
- Provide a detailed examination of the sponsor's special technical needs and mission requirements that are being performed by the FFRDC to determine, if and at what level, they should continue to exist (FAR 32.017-4 (c)(1)),

Identify requirements for FFRDC support including known specific programs involved, the level of effort required and the types of tasks to be performed,

- Consideration of alternative sources (FAR 35. 107-4(c)(2)):

Specify the special research, systems development, or analytical needs, skills, and/or capabilities involved in accomplishing FFRDC tasks.

Explain why the capabilities cannot be provided by in-house personnel, private sector contractors, university-affiliated organizations, or another existing FFRDC. Include statements on the alternatives to the FFRDC that were considered and the rationale for not selecting each of them.

- Provide a detailed assessment of the efficiency and effectiveness of the FFRDC in meeting a sponsor's/user's needs including the FFRDC's ability to maintain its objectivity, independence, quick response capability, currency in its field(s) of expertise, and familiarity with the needs of

Include a summary of FFRDC accomplishments and their effectiveness in meeting user needs since the last comprehensive review, As a minimum, the quality and timeliness of the work produced, the number and dollar value of projects and programs assessed, and performance based on the user evaluations should be addressed, A summary of the results of the most recent annual reviews should be included, All users should participate in this portion of the comprehensive review. Discuss any criticisms or concerns that the users had with FFRDC performance and the steps taken to resolve those issues.

- Conduct an assessment of the FFRDC management controls to ensure cost-effective operation (FAR 35.017-4(C)(4)).

Discuss accounting and purchasing systems; overhead costs and management fees; oversight actions taken to verify cost-effective operations; and other management issues as deemed appropriate.

- Provide a determination that the criteria for establishing the FFRDC is satisfied and that the sponsoring agreement is in compliance with FAR 35.017, FAR 35.017-2, and the DoD Management Plan. Include a statement addressing each of the criteria. Provide a certification that the current sponsoring agreement accurately reflects the mission of the FFRDC.

Discuss agreements between the Government and the FFRDC. These agreements may cover such items as authorization of management fees, provision of Government facilities and equipment, distribution of residual assets of settlement of Liabilities in event of dissolution, maintenance of specific cash reserves, and waivers to accounting policies or regulatory requirements.

- The cover letter transmitting the comprehensive review should provide a recommended course of action for the concurrence of the DDR&E and must be signed by the head of both the sponsoring and contracting agency(ies).